

satellites are probably nearly correct, but the approaching oppositions will furnish better observations for correcting their motions. The preceding observations have been corrected for differential refraction. The correction for the figure of the planet is not sensible.

The companion of *Sirius* was very faint, and was a difficult object to observe. When the images were blazing it was found that the companion was seen better with the aperture reduced to fifteen inches. The last two observations were made with the smaller aperture, and they have been given double weight.

1886, *May 5.*

Observations of Fabry's Comet (d. 1885). By L. A. Eddie.

The recent abnormally clouded condition of our atmosphere, which has been attended by floods of rain and dense fogs, has prevented earlier observations of this comet, which was discovered on December 1 last by M. Fabry at Paris in the northern heavens, and which reached its perihelion about April 6, soon after which passage it was to reveal itself to star gazers in the southern hemisphere. This visitor was seen here for the first time on May 1, and was observed by myself with optical aid on May 2 from 6.30 to comet-set, about 7.40, when the head sunk below the western horizon. When first seen on this occasion it was about 18° above the western horizon, and was a very conspicuous object, with a head of tolerable brilliancy about $15'$ in diameter, and possessing a broad tail widening out to about $1\frac{1}{2}^\circ$, and traceable to about 9° from the nucleus. It shone with a pale straw-coloured light, and the tail appeared perfectly straight without any sign of curvature, but sharply defined. It was situated in the constellation *Eridanus*, about 3° N.W. of ν *Eridani*, just beneath the well-known constellation *Orion*. The tail stretched upwards to a point about half way between β *Eridani* and η *Orionis*. When viewed through the telescope it revealed a bright and well-condensed nucleus, surrounded by a broad but less luminous coma, and conveyed the impression of a brilliant pellet well sunk in the midst of less luminous gas-jets, emitted by itself from around its periphery, which, after extending towards the Sun for a certain distance, were bent back upon themselves and streamed in the opposite direction, gradually widening out, and thus forming an elongated and truncated cone of extremely rare gaseous matter, with a ball of more condensed matter in its longitudinal axis, and situated at a short distance from the narrow extremity. A very small star, probably about the eighth magnitude, was seen through the coma close behind the nucleus, and another again a little higher up in the tail. The nucleus was eccentrically placed within the coma, and the striæ or hair-like nature of this latter was very

marked. The theoretical brightness of the comet now was about 500 times greater than when first discovered by Fabry.

May 3: cloudy and wet. Comet visible for a short interval only, and then indistinctly through misty clouds; it had moved about 9° to the east, and was now placed nearly half way between β and ψ *Eridani*. Nucleus appeared elongated; but this may be owing to the mist.

May 4: evening clear; comet about 7° higher than previous evening, but fading rapidly; could be detected by the naked eye a little before six o'clock. Tail could not be traced this evening further than 6° from the head, but seemed slightly curved, with the convex and more sharply defined margin on the south. It is now situated in the constellation *Lepus*, close to a sixth-magnitude star, near the tip of the ears of the hare. The nucleus, when viewed through the $9\frac{1}{2}$ -inch Calver, appeared very bright and condensed, and sharply defined, and of a ruddy brown colour, surrounded by a pale yellow coma of hyperbolic form, with its vertex almost pointed, and spreading out considerably in a lateral direction, so as to give the appearance of its possessing two luminous wings. The portion immediately behind the nucleus was comparatively dark, and the nucleus itself was more sharply defined on its eastern border; there was a considerable breadth of coma preceding the nucleus. The coma presented a granulated rather than a cometic appearance.

May 5: evening clear. Comet visible from 6 o'clock. Tail very faint, 5° in length. In $9\frac{1}{2}$ -inch Calver, nucleus very bright and sharply defined. There was a slight trace of the coma preceding the nucleus, forming two or three cometic envelopes of parabolic form; the lateral streams, as seen on the previous evening, were very faint. It was situated near ζ *Leporis*.

May 6: sky hazy, with thin cirri clouds. Comet very dim.; tail scarcely perceptible, about 4° in length. Nucleus in telescope dim, lateral streams not detectable. It was situated in *Lepus*, and a straight line drawn from α , through β *Canis Majoris*, and continued as far beyond β as this star is from α (*Sirius*), would mark almost the exact spot that the comet occupied at 7 o'clock.

May 7: sky hazy. Comet very faint. Tail about 2° in length. Not observable by telescope.

May 8: evening clear. Comet faintly visible, but tail scarcely discernible, being eclipsed by moonlight.

May 9 and May 10, clouded.

May 11: sky clear for short interval, moon very bright. Comet just discernible to the naked eye, situated in *Canis Major*, forming a right angle with ϵ and 22 *Canis*, about twice as far from ϵ as this star is from 22 *Canis*. When viewed through a $3\frac{1}{2}$ -inch Refractor appeared like a nebula slightly condensed in centre, and of ragged outline. In the $9\frac{1}{2}$ -inch Calver the nucleus shone brightly, and still retained the deep ruddy colour which is a distinguishing feature in this comet. This is the

first comet that I have observed whose nucleus has been of so deep a tint ; the outlying coma is still a pale yellow.

May 12 : comet very faint, only just distinguishable to unaided vision as a dim misty spot. It is now becoming a very insignificant object in the telescope, the background being so brilliantly illuminated by moonlight.

May 13 : not observed.

May 14 : comet invisible to naked eye. Moon very bright, easily found with finder. Has just entered the constellation *Argo Navis*. Nucleus still well condensed. No detectable change. Very mean object now.

Approximate Right Ascension and Declination at 7.30 P.M.

Date.	R.A.	South Dec.	Date.	R.A.	South Dec.
	h m	° ′		h m	° ′
May 2	4 22	1 30	May 7	6 15	22 0
3	5 12	6 0	8	6 28	24 30
4	5 20	12 0	11	7 4	29 30
5	5 37	15 0	12	7 15	30 15
6	5 54	19 15	14	7 24	33 30

Cape of Good Hope, Graham's Town.

Sextant Observations of Fabry's Comet.

(Communicated by Captain H. Toynbee.)

Observations made on board the barque "Viola," by Captain J. H. Price.

1886, May 2, 7.20 P.M. (10^h 5^m 4^s G.M.T.) Lat. 16° 24' N.; Long. 35° 31' W. Comet's position was as follows :

Nucleus to <i>Betelgeuse</i>	...	...	...	...	20 5
„ „ <i>Rigel</i>	...	...	...	...	10 20

Tail about 5° in length.

Observations made on board the H.M.S. "Spartan," by Captain A. McLean Wait.

1886, May 4, 8 P.M. (8^h 45^m 55^s G.M.T.) Lat. 1° 54' S.; Long. 12° 20' W. Barometer 30.138. Thermometer, wet bulb 78°, dry bulb 85°. Comet's position was as follows :—

Nucleus to <i>Betelgeuse</i>	...	...	...	...	20 35
„ „ <i>Sirius</i>	...	...	...	...	19 30